



Large Jail Network Bulletin

Telemedicine in the Detention Environment

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Inmate health care costs absorb a significant portion of jail budgets. Court decisions in recent years have also prompted increases in the level of care that must be provided to inmates in detention environments. At the same time they look for ways to improve medical services, administrators must also control costs. One approach that has recently gained favor is the move to charge inmates through medical co-pay plans. Another new development is "telemedicine," the provision of health care services through interactive television.

On June 5, 1995, the Arapahoe County Sheriffs Office began supplementing its regular inmate health care with telemedicine services. With almost 2 years of experience, Arapahoe County is satisfied with the results of this initiative and now plans to expand the use of telemedicine services.

Traditionally, jails have been slow to adopt new technology. The prevailing attitude is, "Let someone else try it first; then if it works, maybe we'll try." The Federal Bureau of Prisons has made

telemedicine an advanced part of its medical programs as have several state correctional systems, including Virginia's. Despite the use of telemedicine in prisons, however, our inquiries found Erie County, New York, to be the only other county currently using telemedicine in a detention facility. Nevertheless, we believe that within 5 years at least half of the larger jails will be using telemedicine to some degree.

How Telemedicine Works

Telemedicine enables a physician to conduct an examination of an inmate from a distance—just as video court advisement facilitates court appearances from a distance. The inmate is placed in the detention facility's medical exam room, and the physician is located in the hospital "command center" miles away.

Nursing staff who are specifically trained in using this technology facilitate the live televised interaction between the physician and inmate:

- A stethoscope, transmitting to a headset worn by the physician, enables the physician to listen to the patient's heart and lungs.
 - Following instructions from the physician, the attending nurse provides information such as whether tender tissue is soft or hard.
 - X-rays can also be transmitted from the detention facility to the physician.
- Advantages of Telemedicine**
- Telemedicine offers several distinct advantages over traditional jail medical services:
- Access to specialized care.**
- Telemedicine makes possible a higher level of service because a variety of specialized physicians are available at the hospital command center. A medical history and description of the current problem are reviewed by the physician(s) prior to the telemedicine consultation.
- In a traditional setting, on the other hand, a general practitioner comes to the facility, where both chart review and consultation occur. This means that a larger number of inmates must be transported outside the facility for specialty consultations.
- Positioned by the nurse, cameras with close-up capabilities and other diagnostic equipment transfer the necessary information to the physician. The camera can focus on anything from a hair follicle to nodes inside the throat.

Emergency services. Another service enhancement offered by telemedicine is the ability to have an interactive consultation any time of the day. Both the hospital and jail function 24 hours a day. If an emergency consultation is needed, it can be easily arranged. Traditional methods are restricted to the hours when the physician is in the facility. After-hours services require a phone consultation with an on-call physician and, too often, a trip to a medical emergency facility.

Shared use by law enforcement. Additionally, a telemedicine system can be expanded to include the variety of police agencies that transport prisoners to the detention facility. Based on our experiences with litigation and case law, most jails require a medical clearance by the arresting agency for prisoners suspected of having a serious medical need. The cost and time involved in the police agency's visit to an emergency room can be significantly reduced through telemedicine technology. The arresting agency, detention medical staff, and hospital have the potential to communicate jointly through telemedicine to coordinate care of the prisoner.

Physician costs. Physicians serving detention facilities must factor in travel time when negotiating their rates. Telemedicine eliminates travel, which can either result in a cost reduction or in more time devoted to inmate care. Arapahoe County's medical system provides a balance between physician time on-site and

consultations via telemedicine. We were able to reduce physicians' on-site visits from 5 to 3 days per week (Monday, Wednesday, and Friday), with telemedicine being used on the other 2 days.

Arapahoe County plans to expand its telemedicine equipment to provide more specialty services. An evaluation of specialty consultations outside the facility revealed an average medical cost of \$140, plus \$120 for security personnel. On the other hand, specialty consultations via telemedicine cost \$75 an hour, and more than one inmate can be seen in that hour.

Security. Every medical transport presents security risks, and every transport avoided through telemedicine eliminates those risks. Telemedicine also removes the possibility of an inmate assaulting a physician or an inmate procuring one of the physician's medical instruments, turning that into a weapon inside the facility.

Efficiency. When a physician is face to face with an inmate in a medical consultation, the inmate can easily stray from the initial complaint. It is difficult for the physician to refocus the conversation, as there is a chance the inmate will become angry or assaultive. There is no such risk during a telemedicine consultation. Because the physician can easily bring the discussion back to the initial complaint, this also results in cost savings. The telemedicine consultation takes less time, which

means that the physician can see more inmates during the contracted time.

System Costs

The cost for the telemedicine equipment can be negotiated in various ways. Our costs are incorporated into the fees negotiated with our medical management company. This arrangement makes the management company responsible for the equipment and any replacement.

As a result, the county does not purchase equipment that may soon be outdated by new technology. Instead, the management company leases the equipment and can easily make replacements as technology advances. The telemedicine equipment uses regular telephone lines; the minimal transmission cost is the direct responsibility of the county.

Inmate and Staff Acceptance

We conducted an inmate survey 6 weeks after implementing telemedicine and are currently conducting another. Inmates who participated in telemedicine were divided in their opinions. Half indicated that telemedicine did provide the necessary personal interaction for diagnosis and treatment, while the other half felt cheated because the physician diagnosed and treated without physically touching them.

A number of inmates decline to report for the medical line when their

names are called for telemedicine. Our observation is that those who

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refuse are not inmates with valid medical needs, but those who use medical calls as an opportunity to leave the cellblock.

Security staff favor telemedicine over traditional programs because of the time saved in the movement of inmates. Both security and health staff recognize telemedicine for reducing outside transports, decreasing inmates' non-valid health complaints, increasing the number of inmates with valid medical concerns seen by the physicians, and lessening the risks to the physician.

Accreditation Standards

Under Sheriff Patrick Sullivan, Arapahoe County has consistently maintained accreditation by the National Commission on Correctional Health Care (NCCHC), the American Correctional Association (ACA), and the Commission on Accreditation for Law Enforcement Agencies (CALEA). When contracting with Medical Development International (MDI) for medical management and telemedicine, our directive was that telemedicine services must fit into the requirements of NCCHC accreditation.

Our inquiries to NCCHC determined that telemedicine was new territory for them. MDI met with NCCHC, and we all worked together to ensure that protocols complied with NCCHC standards.

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The ground is broken, as telemedicine is now being used effectively in federal and state corrections facilities and in county detention environments.

In addition to telemedicine, interactive television can also be used to provide:

- The continuing education units (CEU) needed for medical staff to retain certification;
- Staff training;
- Programs for inmates, including anger management/conflict resolution; and
- Visitation.

Approximately 25 percent of the Arapahoe County inmates requiring medical treatment are diagnosed through telemedicine. This use of telemedicine reduces costs, enhances services, and augments security. We anticipate that other county detention

facilities will begin using telemedicine in the next few years. Whether your jail is located in a rural or urban setting, the benefits are significant.

For additional information, contact Captain Frank Henn, Arapahoe County Sheriff's Office; telephone (303) 649-0903. ■